(1) *Risk Category I Adjusted Rate Schedule.* The adjusted annual assessment rates for all institutions in Risk Category I shall range from 5 to 7 basis points.

(2) *Risk Category II, III, and IV Adjusted Rate Schedule.* The adjusted annual assessment rates for Risk Categories II, III, and IV shall be 10, 28, and 43 basis points respectively.

(3) All institutions in any one risk category, other than Risk Category I, will be charged the same assessment rate.

(c) *Rate schedule adjustments and procedures*—(1) *Adjustments.* The Board may increase or decrease the base assessment schedule up to a maximum increase of 3 basis points or a fraction thereof or a maximum decrease of 3 basis points or a fraction thereof (after aggregating increases and decreases), as the Board deems necessary. Any such adjustment shall apply uniformly to each rate in the base assessment schedule. In no case may such adjustments result in an assessment rate that is mathematically less than zero or in a rate schedule that, at any time, is more than 3 basis points above or below the base assessment schedule for the Deposit Insurance Fund, nor may any one such adjustment constitute an increase or decrease of more than 3 basis points.

(2) *Amount of revenue.* In setting assessment rates, the Board shall take into consideration the following:

(i) Estimated operating expenses of the Deposit Insurance Fund;

(ii) Case resolution expenditures and income of the Deposit Insurance Fund;

(iii) The projected effects of assessments on the capital and earnings of the institutions paying assessments to the Deposit Insurance Fund;

(iv) The risk factors and other factors taken into account pursuant to 12 U.S.C. 1817(b)(1); and

(v) Any other factors the Board may deem appropriate.

(3) *Adjustment procedure.* Any adjustment adopted by the Board pursuant to this paragraph will be adopted by rulemaking, except that the Corporation may set assessment rates as necessary to manage the reserve ratio, within set parameters not exceeding cumulatively 3 basis points, pursuant to paragraph (c)(1) of this section, without further rulemaking.

(4) *Announcement.* The Board shall announce the assessment schedule and the amount and basis for any adjustment thereto not later than 30 days before the quarterly certified statement invoice date specified in §327.3(b) of this part for the first assessment period for which the adjustment shall be effective. Once set, rates will remain in effect until changed by the Board.

[71 FR 69309, Nov. 30, 2006]

APPENDICES A–C TO SUBPART A

APPENDIX A TO SUBPART A

Method to Derive Pricing Multipliers and Uniform Amount

I. Introduction

The uniform amount and pricing multipliers are derived from:

- A model (the Statistical Model) that estimates the probability that a Risk Category I institution will be downgraded to a composite CAMELS rating of 3 or worse within one year;
- Minimum and maximum downgrade probability cutoff values, based on data from June 2006, that will determine which small institutions will be charged the minimum and maximum assessment rates in Risk Category I;
- The minimum base assessment rate for Risk Category I, equal to two basis points, and
- The maximum base assessment rate for Risk Category I, which is two basis points higher than the minimum rate.

II. The Statistical Model

The Statistical Model is defined in equation 1a below.

Equation 1a

$$\begin{aligned}\text{Downgrade}(0,1)_{i,t} = {} & \beta_0 + \beta_1 (\text{Tier 1 leverage ratio}_{it}) \\ & + \beta_2 (\text{Loans past due 30 to 89 days ratio}_{it}) \\ & + \beta_3 (\text{Nonperforming asset ratio}_{it}) \\ & + \beta_4 (\text{Net loan charge} - \text{off ratio}_{it}) \\ & + \beta_5 (\text{Net income before taxes ratio}_{it}) \\ & + \beta_6 (\text{Weighted average of the C, A, M, E and L component ratings}_{it})\end{aligned}$$

where Downgrade$(0,1)_{i,t}$ (the dependent variable—the event being explained) is the incidence of downgrade from a composite rating of 1 or 2 to a rating of 3 or worse during an on-site examination for an institution i between 3 and 12 months after time t. Time t is the end of a year within the multi-year period over which the model was estimated (as explained below). The dependent variable takes a value of 1 if a downgrade occurs and 0 if it does not.

The explanatory variables (regressors) in the model are five financial ratios and a weighted average of the ''C,'' ''A,'' ''M,'' ''E'' and ''L'' component ratings. The five financial ratios included in the model are:

- Tier 1 leverage ratio
- Loans past due 30–89 days/Gross assets
- Nonperforming assets/Gross assets
- Net loan charge-offs/Gross assets
- Net income before taxes/Risk-weighted assets.

The financial ratios and the weighted average of the ''C,'' ''A,'' ''M,'' ''E'' and ''L'' component ratings (collectively, the regressors) are defined in Table A.1. The component rating for sensitivity to market risk (the ''S'' rating) is not available for years prior to 1997. As a result, and as described in Table A.1, the Statistical Model is estimated using a weighted average of five component ratings excluding the ''S'' component. In addition, delinquency and non-accrual data on government guaranteed loans are not available before 1993 for Call Report filers and before the third quarter of 2005 for TFR filers. As a result, and as also described in Table A.1, the Statistical Model is estimated without deducting delinquent or past-due government guaranteed loans from either the loans past due 30–89 days to gross assets ratio or the nonperforming assets to gross assets ratio.

TABLE A.1.—DEFINITIONS OF REGRESSORS

Regressor	*Description*
Tier 1 Leverage Ratio (%)	Tier 1 capital for Prompt Corrective Action (PCA) divided by adjusted average assets based on the definition for prompt corrective action
Loans Past Due 30–89 Days/Gross Assets (%)	Total loans and lease financing receivables past due 30 through 89 days and still accruing interest divided by gross assets (gross assets equal total assets plus allowance for loan and lease financing receivable losses and allocated transfer risk)
Nonperforming Assets/Gross Assets (%)	Sum of total loans and lease financing receivables past due 90 or more days and still accruing interest, total nonaccrual loans and lease financing receivables, and other real estate owned divided by gross assets
Net Loan Charge-Offs/Gross Assets (%)	Total charged-off loans and lease financing receivables debited to the allowance for loan and lease losses less total recoveries credited to the allowance to loan and lease losses for the most recent twelve months divided by gross assets
Net Income before Taxes/Risk-Weighted Assets (%)	Income before income taxes and extraordinary items and other adjustments for the most recent twelve months divided by risk-weighted assets
Weighted Average of C, A, M, E and L Component Ratings	The weighted sum of the ''C,'' ''A,'' ''M,'' ''E'' and ''L'' CAMELS components, with weights of 28 percent each for the ''C'' and ''M'' components, 22 percent for the ''A'' component, and 11 percent each for the ''E'' and ''L'' components. (For the regression, the ''S'' component is omitted.)

The financial ratio regressors used to estimate the downgrade probabilities are obtained from quarterly reports of condition (Reports of Condition and Income and Thrift Financial Reports). The weighted average of the ''C,'' ''A,'' ''M,'' ''E'' and ''L'' component ratings regressor is based on component ratings obtained from the most recent bank examination conducted within 24 months before the date of the report of condition.

The Statistical Model uses ordinary least squares (OLS) regression to estimate downgrade probabilities. The model is estimated with data from a multi-year period (as explained below) for all institutions in Risk Category I, except for institutions established within five years before the date of the report of condition.

The OLS regression estimates coefficients, β_j, for a given regressor j and a constant amount, β_0, as specified in equation 1a. As shown in equation 1b below, these coefficients are multiplied by values of risk measures at time T, which is the date of the report of condition corresponding to the end of the quarter for which the assessment rate is computed. The sum of the products is then added to the constant amount to produce an estimated probability, $d_{i,T}$, that an institution will be downgraded to 3 or worse within 3 to 12 months from time T.

The risk measures are financial ratios as defined in Table A.1, except that the loans past due 30 to 89 days ratio and the nonperforming asset ratio are adjusted to exclude the maximum amount recoverable from the U.S. Government, its agencies or government-sponsored agencies, under guarantee or insurance provisions. Also, the weighted sum of six CAMELS component ratings is used, with weights of 25 percent each for the ''C'' and ''M'' components, 20 percent for the ''A'' component, and 10 percent each for the ''E,'' ''L,'' and ''S'' components.

Equation 1b

$$\begin{aligned} d_{iT} = {} & \beta_0 + \beta_1 \left(\text{Tier 1 leverage ratio}_{iT}\right) \\ & + \beta_2 \left(\text{Loans past due 30 to 89 days ratio}_{iT}\right) \\ & + \beta_3 \left(\text{Nonperforming asset ratio}_{iT}\right) \\ & + \beta_4 \left(\text{Net loan charge} - \text{off ratio}_{iT}\right) \\ & + \beta_5 \left(\text{Net income before taxes ratio}_{iT}\right) \\ & + \beta_6 \left(\text{Weighted average of CAMELS component ratings}_{iT}\right) \end{aligned}$$

III. Minimum and maximum downgrade probability cutoff values

The pricing multipliers are also determined by minimum and maximum downgrade probability cutoff values, which will be computed as follows:

- The minimum downgrade probability cutoff value will be the maximum downgrade probability among the forty-five percent of all small insured institutions in Risk Category I (excluding new institutions) with the lowest estimated downgrade probabilities, computed using values of the risk measures as of June 30, 2006.[1] The minimum downgrade probability cutoff value is approximately 2 percent.
- The maximum downgrade probability cutoff value will be the minimum downgrade probability among the five percent of all small insured institutions in Risk Category I (excluding new institutions) with the highest estimated downgrade probabilities, computed using values of the risk measures as of June 30, 2006.[2] The maximum downgrade probability cutoff value is approximately 14 percent.

IV. Derivation of uniform amount and pricing multipliers

The uniform amount and pricing multipliers used to compute the annual base assessment rate in basis points, P_{iT}, for any such institution i at a given time T will be determined from the Statistical Model, the minimum and maximum downgrade probability cutoff values, and minimum and maximum base assessment rates in Risk Category I as follows:

[1] As used in this context, a ''new institution'' means an institution that has been chartered as a bank or thrift for less than five years.

[2] As used in this context, a ''new institution'' means an institution that has been chartered as a bank or thrift for less than five years.

Equation 2

$$P_{iT} = \alpha_0 + \alpha_1 * d_{iT}, \text{ subject to } 2 \le P_{iT} \le 4$$

where α_0 and α_1 are a constant term and a scale factor used to convert d_{iT} (the estimated downgrade probability for institution i at a given time T from the Statistical Model) to an assessment rate, respectively. The numbers 2 and 4 in the restriction to equation 2 are the minimum base assessment rate and maximum base assessment rate, respectively, and they are expressed in basis points.

(P_{iT} is expressed as an annual rate, but the actual rate applied in any quarter will be $\frac{P_{iT}}{4}$.)

Solving equation 2 for minimum and maximum base assessment rates simultaneously, ($2 = \alpha_0 + \alpha_1 * 0.02$ and $4 = \alpha_0 + \alpha_1 * 0.14$), where 0.02 is the minimum downgrade probability cutoff value and 0.14 is the maximum downgrade probability cutoff value, results in values for the constant amount, α_0, and the scale factor, α_1:

Equation 3

$$\alpha_0 = 2 - \frac{2 * 0.02}{(0.14 - 0.02)} = 1.67 \text{ and}$$

Equation 4

$$\alpha_i = \frac{2}{(0.14 - 0.02)} = 16.67$$

Substituting equations 1b, 3 and 4 into equation 2 produces an annual base assessment rate for institution i at time T, P_{iT}, in terms of the uniform amount, the pricing multipliers and the ratios and weighted average CAMELS component rating referred to in 12 CFR 327.9(d)(2)(i):

Equation 5

$$P_{iT} = [1.67 + 16.67 * \beta_0] + 16.67 * [\beta_1 (\text{Tier 1 Leverage Ratio}_T)] +$$
$$16.67 * [\beta_2 (\text{Loans past due 30 to 89 days ratio}_T)] + 16.67 * [\beta_3 (\text{Nonperforming asset ratio}_T)] +$$
$$16.67 * [\beta_4 (\text{Net loan charge} - \text{off ratio}_T)] + 16.67 * [\beta_5 (\text{Net income before taxes ratio}_T)] +$$
$$16.67 * [\beta_7 (\text{Weighted average CAMELS component rating}_T)]$$

again subject to $2 \le P_{iT} \le 4$

where $1.67 + 16.67 * \beta_0$ equals the uniform amount, $16.67 * \beta_j$ is a pricing multiplier for the associated risk measure j, and T is the date of the report of condition corresponding to the end of the quarter for which the assessment rate is computed.

V. Updating the Statistical Model, uniform amount, and pricing multipliers

The initial Statistical Model is estimated using year-end financial ratios and the weighted average of the ''C,'' ''A,'' ''M,'' ''E'' and ''L'' component ratings over the 1984 to 2004 period and downgrade data from the 1985 to 2005 period. The FDIC may, from time to time, but no more frequently than annually, re-estimate the Statistical Model with updated data and publish a new formula for determining assessment rates—equation 5—based on updated uniform amounts and pricing multipliers. However, the minimum and maximum downgrade probability cutoff values will not change without additional notice-and-comment rulemaking. The period covered by the analysis will be lengthened by one year each year; however, from time to time, the FDIC may drop some earlier years from its analysis.

[71 FR 69313, Nov. 30, 2006]